Emotional Intelligence Questionnaire – EIQ^{3D}

User's Guide

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Team Focus Limited

Emotional Intelligence Questionnaire - EIQ³ᴰ

User's Guide v2.1

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Introduction

Our emotional lives have been a prominent area of study for psychologists since the late 1800s, though they have been central to the work of writers, artists and, indeed, all human beings for thousands of years. The concept of emotional intelligence brings together a substantial body of thinking in a powerful model for personal growth. Though its roots can be traced back over 70 years, using emotional intelligence effectively is currently recognised by many organisations as being a key element in developing competitive advantage.

The Profiling for Success Emotional Intelligence Questionnaire (EIQ^{3D}) is an innovative assessment of emotional intelligence available through the Profiling for Success online assessment system. Developed from applied research and practical experience, it offers a unique window into how we manage our emotional life that can be used for a wide range of organisational applications and beyond. The self-report EIQ^{3D} includes an option to ask a co-respondent to give their perspective on the respondent, so providing a powerful challenge to a respondent's self-perceptions.

The purpose of this User's Guide is to support users of the EIQ^{3D} by introducing the background and development of the EIQ^{3D} and offering advice on its applications, administration and working with the results. It does not set out to prescribe a process, but give guidelines that users can tailor to their own preferences and situations as their experience of using the EIQ^{3D} grows.

The first section of the User's Guide for the EIQ^{3D} gives an overview of the research on emotional intelligence, focussing on its definition, issues for assessment and key research findings relevant to the application of emotional intelligence to individuals and organisations. The key features of the EIQ^{3D} are also described here, along with illustrations of how the assessment may be used.

The development of the EIQ^{3D}, from its early roots in leadership competencies through an integrative model of emotional intelligence to its current form as a 360° feedback tool and the questionnaire version presented here, is described in Section Two. The third section covers administration of the EIQ^{3D}, with the fourth dealing with interpretation of the reports and conducting reviews with questionnaire respondents.

The fifth section describes the characteristics of the standardisation sample on which the normative data is based, and the technical properties of the EIQ^{3D} including reliability, validity and the influence of background factors on scale scores.

It is recommended that all users read Sections Two, Three and Four prior to working with the EIQ^{3D}. Interested readers may also want to read Section One on the background to emotional intelligence and the technical aspects of the EIQ^{3D} in Section Five.

Section One: The concept of emotional intelligence

Emotional life has been a central theme of psychology since its inception as a scientific discipline in the 1800s. Emotional intelligence provides a unifying framework for the study and application of emotions which has captured the imagination of academics, practitioners and the public alike. The Profiling for Success Emotional Intelligence Questionnaire (EIQ^{3D}) is an innovative online assessment of emotional intelligence, rigorously developed and based on a comprehensive model of emotional intelligence.

The User's Guide has been developed to support users at all stages of their work with the EIQ^{3D}. This section of the User's Guide starts with an overview of emotional intelligence, giving a background to its nature, why it is important to individual and organisational life and issues in its assessment. It then goes on to present the thinking behind the EIQ^{3D} before introducing the specific benefits of using the EIQ^{3D} to assess emotional intelligence and areas for application.

What is emotional intelligence?

Emotional intelligence is somewhat unusual in psychology, as the majority of writers and researchers are in agreement as to its definition, at least at the broadest level. Daniel Goleman (1996, 1998) has probably influenced the definition of emotional intelligence more than any other writer, due to the popularity of his books on the subject, though he draws heavily on the landmark work of Salovey and Mayer who previously defined emotional intelligence as:

> *"the ability to monitor one's own and other's emotions, to discriminate among them, and to use the information to guide one's thinking and actions"* (1990, p189*).

Three distinct aspects of emotional intelligence follow from Salovey and Mayer's definition:

- the ability to accurately appraise emotions in the self and others, through both verbal and non-verbal channels;

- the ability to regulate or control emotion in the self and others;

- the ability to use emotion to regulate and direct thought.

Salovey and Mayer's definition reflects work dating from the 1920s by the psychologist Edward Thorndike who proposed an aspect of intelligence that is *"the ability to understand and manage men and women, boys and girls – to act widely in human relations"* (1920, p288). Edward's son, Robert Thorndike, furthered research into social intelligence, but in 1937 concluded that attempts to measure social intelligence had been unsuccessful, possibly due to it resulting from the interaction of different abilities (Thorndike and Stein, 1937).

Though the idea of social intelligence had fallen out of favour by the 1960s, by the end of the 1970s a new generation of intelligence theorists were seeking to challenge the somewhat limited scope of intelligence. Notable amongst these were Robert Sternberg and Howard Gardner. Sternberg's (1985) triarchic model of intelligence proposes three types of intelligence – analytical, creative and practical. Although none of Sternberg's three intelligences have a direct link to emotional intelligence, elements of dealing with the environment and others can be seen in his definitions of creative and practical intelligence.

Howard Gardner has challenged what it means to be intelligent more than any psychologist in recent years. In Frames of Mind (1983) he argued for the existence of seven distinct types of intelligence, including interpersonal and intrapersonal. Intrapersonal intelligence concerns the ability to access one's own feelings, the capacity to discriminate amongst them and draw on them as a means of guiding behaviour, whereas interpersonal intelligence is the ability to understand other people and know what they are feeling.

Certain themes can be drawn from the definitions reviewed here. Emotional intelligence involves both the individual and others; it is the ability to understand your own emotions and those of people around you. Emotions also need to be managed effectively, not by shutting them off but by appreciating their origins and potential effects. A further theme involves how different emotional states can enhance activities such as problem-solving, influencing others and leadership by being motivational, adding depth and authenticity to interactions. Goleman (1998, p27-8) brings many of these ideas together in his five emotional competencies:

- self awareness – knowing one's internal states, resources and intuitions;

- self regulation – managing one's internal states, impulses and resources;

- motivation – emotional tendencies that guide or facilitate reaching goals;

- empathy – awareness of others' feelings, needs and concerns;

- social skills – adeptness at inducing desirable responses in others.

The case for emotional intelligence

Proponents of emotional intelligence have been keen to cite the limited ability of traditional intelligence or ability measures to predict life success (e.g. Goleman, 1998) and have seen this search for predictive power as an important driver behind the interest in emotional intelligence. Such claims do much to misrepresent the proven utility of ability measures (e.g. Schmidt and Hunter, 1998) and also over-simplify the interpretation of the correlation coefficient, the fundamental measure of predictive validity. Emotional intelligence remains, however, a significant capability and is realistically framed in Mayer and Caruso's words: "*EI is an important capability, but one that coexists with many other important strengths and weaknesses, and that it affects some areas more than others*" (2002, p4-5).

A number of areas where higher levels of emotional intelligence may prove beneficial are given by Salovey and Mayer (1989-90). Regulating emotions can have a positive effect on planning, particularly in perception of the likelihood of desirable and less desirable outcomes. People in positive moods are known to see positive outcomes as being more likely and negative ones less likely, with the opposite being true for people experiencing negative emotions. The manipulation of emotions can therefore contribute to more realistic appraisals and planning. Creativity and problem-solving are further areas that can utilise emotional intelligence. Positive emotions are associated with more creative responses to standard creativity tasks and greater efficiency in categorisation tasks. The phenomenon of 'state dependent recall' also means that people are more likely to recall experiences from their past that match their current emotional state (e.g. Blaney, 1986).

Salovey and Mayer (1989-90) also identify the importance of emotions in maintaining motivation and drive in the face of challenging tasks. Individuals are likely to adopt different strategies in how they use emotions for motivational purposes. For example, some may be motivated by the positive emotions that come with success and reward, others may seek the positive emotions that result from creating successful teams and the resulting interactions. For others the emphasis may be more on the avoidance of negative emotions that come with failure, or the use of emotions such as anxiety generated by deadlines to energise and sustain action. Regardless of the approach taken by an individual, emotional intelligence can contribute to motivation through the appreciation, regulation and direction of emotions to achieve desired goals both in the self and others.

The importance of emotional intelligence for general well-being is a further area that has widespread implications for work and personal life. According to a recent CIPD survey, stress is the major cause of long-term absence in non-manual workers (CIPD, 2006). Through the mechanisms of appreciation and regulation of emotional states, higher levels of emotional intelligence will contribute to effective coping with stress and resilience, therefore reducing the levels of stress that are experienced.

The examples given above relate to specific activities. Whilst these activities apply to many areas of life, they have been studied extensively in relation to organisational activities such as leadership and teamwork. As many emotions grow out of social interaction (Kemper, 1978), organisational life, and teams in particular, are both a powerful source of emotion and, in turn, are affected by the emotions of their members (Barsade & Gibson, 1998). Goleman (2001) reviews research showing that emotionally intelligent working environments nurture and engage employees and that this, in turn, is reflected in organisational success.

The role of leaders in influencing the climate of emotional intelligence can be seen from studies looking at the performance of different divisions within an organisation. Divisions with leaders demonstrating higher levels of emotional competencies exceeded targets by between 15 and 20 percent, compared to those with lower levels of emotional competencies who underperformed by a similar degree (McClelland, 1998).

Emotional intelligence has a wide range of applications and is supported by numerous studies to support its practical applications, though only a small sample is given here. Claims for its validity have been exaggerated in the past, but a more mature approach to its application and study has now started to produce a coherent and defensible body of research supporting the validity of emotional intelligence.

Issues in the measurement of emotional intelligence

The phrase 'emotional intelligence' has posed a particular problem for psychologists as it brings together two elements with very different measurement philosophies.

'Emotion' is used to describe strong but short-lived feelings, of which we are usually acutely aware. It is distinguished from terms such as 'mood' which reflect longer-term, pervasive but low-level feelings, though the two are clearly not fully independent of each other as reports of emotion over short and much longer timeframes are highly correlated (Watson, Clark and Tellegen, 1988). Whilst some progress has been made in the objective assessment of emotion through techniques such as galvanic skin response (GSR) and more sophisticated brain imaging technologies, self-report checklists or questionnaires remain by far the most prevalent approach.

Convenience and relative ease of development are significant reasons for self-report methodology, but more fundamental is the pervasive belief that the individual is always the most valid source of information about their emotional state. The self-report approach is not without its critics (e.g. McDonald, 2000) as it is not commonly used to assess other aspects of ability and, when it is, associations between self-report and objective measures are usually weak (e.g. Paulhus, Lysy and Yik, 1998).

In contrast to the subjective self-report approaches prevalent in the study of emotions, objective measurement has been the technique most widely applied to the measurement of intelligence. Objective assessments of intelligence or specific abilities (e.g. verbal or numerical reasoning) are widely used in recruitment, development and guidance. These measures most commonly assess analytical ability or crystallised knowledge and are characterised by multiple-choice tests with one correct answer option and a number of incorrect options or 'distractors'.

The bringing together of the terms 'emotion' and 'intelligence' has not resulted in a consensus on the most appropriate measurement approach. The majority of emotional intelligence assessments are based on self-report methodology (e.g. Cooper and Sawaf, 1997; Goleman, 1995; and Bar-On, 1998), with the chief advocates of the objective assessment approach being Salovey, Mayer and colleagues (e.g. Mayer, Caruso and Salovey, 1997).

So what can be made of these apparently contradictory approaches to evaluating emotional intelligence? To reach a synthesis, it is necessary to appreciate that many measures, whether self-report or objective, contribute to personal or work success but are not direct measures of it. McClelland (1973) and subsequently Boyatzis (1982) emphasised the importance of competence rather than intelligence, viewing competencies as resulting from combinations of knowledge, skills and attributes. Goleman (1988) takes a similar perspective and views emotional intelligence as the basis for acquiring emotional competencies. Empirical evidence for this proposition has been found by Lopes, Salovey and Straus (2003), who showed objective measures of emotional intelligence and self-reports of personality independently contributed to satisfaction with social relationships. There is, therefore, space for objective and self-report assessments of emotional intelligence to co-exist and for both to contribute to understanding emotionally intelligent behaviour.

Reflections on emotional intelligence

In developing the EIQ^{3D}, one of the major aims was to find a balance between the focus on the individual and the focus on others. Self-report assessments focus primarily on the individual, whereas objective assessments show a bias towards others, meaning many emotional intelligence assessments and models are unbalanced in their emphasis.

A greater focus on the individual can mean that the interpersonal elements of emotional intelligence are given less prominence. It also ignores the fact that whilst emotions are experienced subjectively as an internal state, it is the external world and particularly our relational interactions that are the major source of these emotions (Kemper, 1978). Experience of individual, team and organisational development shows that it is often the interpersonal competencies, particularly those that affect the quality of relationships, which have the biggest impact on success. It is therefore important to appreciate how the intrapersonal elements of emotional intelligence are reflected in the interpersonal world to build positive, healthy relationships.

It is our belief that this relational element to emotional intelligence cannot be ignored if interventions in this arena are to be successful. The importance of relationships to all areas of life have been eloquently stated by Schluter and Lee (1993) who also present a model for relational interventions, based on the idea of 'relational proximity'. A joint appreciation of the self and the relational world, through models such as relational proximity, are the building blocks of a 'relational intelligence' to which emotional intelligence is only one contributing factor, albeit a significant one.

With this in mind, the EIQ^{3D} focuses equally on both the self and others in its assessment of emotional intelligence, mirroring internal competencies with their equivalent in the external world. It therefore provides a focus for both personal development and the development of competences to build successful relationships.

Key benefits of the EIQ3D

The EIQ^{3D} has been developed to address key issues in the growth of individuals, teams and organisations. Based on over 10 years of research, empirical analysis and practical experience the EIQ^{3D} combines innovative thinking in the area of emotional intelligence supported by a rigorous analysis of the actual behaviours that contribute to success in the workplace. Its key benefits include:

- giving an equal focus to emotional competencies directed internally towards the self and externally towards others, the EIQ^{3D} develops both personal and interpersonal awareness. In directly addressing the relational aspects of emotional intelligence the EIQ^{3D} can be used to support the development of productive relationships, an area increasingly recognised as key to organisational success;

- the option to include a co-respondent, where another person completes the EIQ^{3D} with references to the respondent, adds a significant dimension to the assessment process by allowing the respondent to better understand how others perceive their emotional competencies;

- based on a comprehensive model of emotional intelligence, the EIQ^{3D} can be interpreted at the level of six major areas or 24 individual competencies using both raw score and normative profiles. The EIQ^{3D} model facilitates feedback and development, and provides a common language for individuals, teams and organisations to explore emotional competence;

- delivered by the Profiling for Success online assessment system, users have full control over the administration and reporting features of the EIQ^{3D}. Questionnaires are automatically analysed to produce expert narrative reports or data-rich administrators' reports, delivered via email within minutes of completion.

Applications of the EIQ3D

An understanding of emotional intelligence can play a significant role in many areas. Some of the areas in which it is most commonly applied are introduced below, though this should not be seen as an exhaustive list and users of the EIQ^{3D} are encouraged to adapt and build on these examples.

Personal and career development – The EIQ^{3D} is best viewed as part of a process that allows a respondent to reflect on their reactions to a set of personal competencies to support their development. The individual competencies and the model on which the EIQ^{3D} is based provide a method of structuring a review of results and development activities and, importantly, give a common language for the respondent and a facilitator to work with. The option of using a co-respondent to give their perceptions of the respondent adds a new dimension to the assessment process that is particularly powerful in a development context. The co-respondent provides feedback on how the respondent may come across to others and so challenges some of the biases that can appear through self-report instruments. An analysis of any 'gaps' or differences between the two sets of responses provides a particularly powerful area for exploration and development.

Development will be most effective when questionnaire results are integrated with the respondent's personal experiences. Respondents may be encouraged to recall specific experiences, analyse the 'emotional' elements of these experiences and relate them to development needs suggested by the EIQ^{3D}. Development activities can then be set and the respondent encouraged to practise and apply their skills in their personal and work life.

Team development – Organisations increasingly rely on team performance for their overall success, though these teams may be loosely structured, exist only for the duration of a specific project and may not be co-located ('virtual' teams). Diversity in teams is widely recognised as being a strength, but with diversity come differences that can be the source of conflict and impair the co-operation and collaboration. Positive interpersonal interactions and the relationships that develop from these underpin team and organisational success, and are also a significant source of emotion. Without a constructive appreciation of diversity and the strengths of different team members, however, emotions can become 'hothoused' in teams and the most significant derailer to success.

The EIQ^{3D} is particularly suited to team development due to its balance between exploring self-focussed and other focussed aspects of emotional intelligence. Starting with individual team members, the EIQ^{3D} supports the individual team members in understanding and developing their personal emotional competencies. Using the co-respondent version of the EIQ^{3D} can be particularly powerful in these circumstances to gain feedback from another member of the team. Teams can then be encouraged to explore how they work together to deal with emotions effectively to build trust, shared identity and group efficacy. The EIQ^{3D} model may be a useful framework for structuring interventions, particularly as it can give teams a shared language for discussing diversity and using this constructively.

Recruitment – The emotional competencies assessed by the EIQ^{3D} will have a significant impact on performance in a wide variety of job roles, giving it obvious appeal as a selection instrument. When used for selection the EIQ^{3D} should be seen as contributing to the overall picture of an individual, and never used or interpreted in the absence of additional information. Although it has good psychometric properties (see Technical information, Section Five), the EIQ^{3D} is a behavioural measure so its items are relatively transparent and so open to faking or deliberate distortion. To reduce distortion, careful administration is important in selection situations, as is exploration of results with the respondent to obtain evidence to support or challenge the obtained profile. As with any selection technique, it is important that use of the EIQ^{3D} is based on a thorough job analysis and its effectiveness subsequently validated.

Section Two: The development of the EIQ[3D]

The roots of the EIQ[3D] questionnaire lie in an analysis of leadership competencies conducted by Team Focus over a number of years. The resulting competency frameworks have been used by organisations for selection and development, and have been translated into a 360° feedback model. At the same time, Team Focus was also applying the concepts of emotional intelligence to individual and team development work. Experience gained from development work identified significant overlap between leadership competencies and ideas central to emotional intelligence, a belief that was supported by an analysis of the literature on emotional intelligence.

This section describes the development of the model on which the EIQ[3D] is based, and how the previous work on leadership competencies and work with emotional intelligence led to the development of a 360° emotional intelligence questionnaire and the EIQ[3D].

The EIQ3D model

The starting point for the development of the model underlying the 360° tool, on which the EIQ[3D] is based, was a critical analysis of existing assessments or models of emotional intelligence. The four models that were most influential in the development of the EIQ[3D] were those of Goleman (1998), two by Cooper and Sawaf (1997) and Bar-On (1997). Cooper and Sawaf present both a rational and empirical approach to emotional intelligence – the 'Cornerstones' model and the EQ Map respectively – and both were included in the review. The major areas assessed in these models and the scales within each area are shown in Table 1.

A review of the major areas and their scales identified a number of common elements that appeared to be core to the emotional intelligence concept. A fundamental distinction apparent in each model was between attitudes or abilities focussed on the self and those focussed on other people. This internal and external distinction is widely reflected in the academic literature and, significantly, emphasised by researchers who seek to assess emotional intelligence using traditional, ability-based tests, rather than the self-report measures focussed on here (e.g. Mayer and Salovey, 1996; Mayer, Caruso, Salovey, 2000). Gardner (1983) also draws the distinction between interpersonal and intrapersonal intelligence in his theory of multiple intelligences.

In reviewing the models and assessments, distinctions could also be seen between being aware of and recognising different emotional states, and using this knowledge to manage personal behaviour effectively and manage the behaviour of others. A further area that emerged to differing degrees from the models that were reviewed included concepts such as energy, motivation and drive, either personal or inspiring this in others. These three dimensions could also be described in terms of their focus, though instead of being directed towards the self or others, their focus was on the gaining of knowledge, the control and application of emotions, and the development and maintenance of motivation respectively.

Using the distinction between focus on the self and other and between competencies related to knowledge, management and motivation, Table 2 re-categorises the major areas of the models shown in Table 1. As can be seen in Table 2, all of the models reviewed are strong on the aspect of 'self focus', though less so on 'other focus'. This emphasis on the self is seen throughout the emotional intelligence literature that views awareness, appreciation and conscious control of emotions as being at the heart of emotional intelligence. Though the importance of expanding these abilities out into the interpersonal world is recognised as a core application of emotional intelligence, it is secondary to the intrapersonal elements. All of the models reviewed also contain elements of knowledge, management and motivation.

Table 1: The major areas and scales of influential emotional intelligence models			
Goleman (1998)	Cooper and Sawaf (1997) – 'Cornerstones' model	Cooper and Sawaf (1997) – EQ Map	Bar-On (1997)
Self awareness Emotional awareness Accurate self assessment Self confidence	**Emotional alchemy** Opportunity sensing Creating the future Reflective time-shifting Intuitive flow	**Emotional literacy** Emotional self awareness Emotional expression Emotional awareness of others	**Intrapersonal** Emotional self awareness Assertiveness Self regard Self actualisation Independence
Self regulation Self control Trustworthiness Conscientiousness Adaptability Innovation	**Emotional literacy** Emotional honesty Emotional energy Practical intuition Emotional feedback	**Emotional competencies** Intentionality Creativity Resilience Interpersonal connections Constructive discontent	**Interpersonal** Empathy Interpersonal relationships Social responsibility
Motivation Achievement drive Commitment Initiative Optimism	**Emotional depth** Applied integrity Influence without authority Commitment Unique potential and purpose	**Values and beliefs** Compassion Outlook Intuition Trust radius Personal power Integrity	**Adaptability** Problem-solving Reality testing Flexibility
Empathy Understanding others Developing others Service orientation Leveraging diversity Political awareness	**Emotional fitness** Authentic presence Trust radius Resilience and renewal Constructive discontent		**Stress management** Stress tolerance Impulse control
Social skills Influence Communication Conflict management Leadership Change catalyst Building bonds Collaboration and co-operation			**General mood** Happiness Optimism

Table 2: Mapping major areas from emotional intelligence models to self versus other focus, and knowledge, management and motivation			
Goleman (1998)	Cooper and Sawaf (1997) – 'Cornerstones' model	Cooper and Sawaf (1997) – EQ Map	Bar-On (1997)
Self focus			
Self awareness Self regulation Motivation	Emotional literacy Emotional alchemy Emotional fitness Emotional depth	Emotional literacy Emotional competencies Values and beliefs	Intrapersonal Adaptability Stress management General mood
Other focus			
Empathy Social skills		Emotional literacy Emotional competencies	Interpersonal
Knowledge			
Self awareness Empathy	Emotional literacy Emotional alchemy	Emotional literacy Values and beliefs	Intrapersonal Interpersonal Adaptability
Management			
Self regulation Social skills	Emotional fitness Emotional depth	Emotional competencies	Intrapersonal Interpersonal Adaptability Stress management
Motivation			
Motivation Social skills	Emotional literacy Emotional alchemy Emotional depth	Values and beliefs	Interpersonal Adaptability General mood

The EIQ[3D] represents a way of bringing together a number of influential emotional intelligence models into a balanced and structured framework. The six major areas of the EIQ[3D] model are defined by whether they reflect competencies that have a primarily inner or outer focus, or are concerned with knowledge, management or motivation, as shown in Table 3. The six major areas of the EIQ[3D] model are: self awareness, self management, self motivation, social awareness, social management and social motivation.

Table 3: The EIQ[3D] model		
	Inner focus	**Outer focus**
Knowledge	**Self awareness** Shows self understanding • Self assessment • Self literacy Shows self value • Self confidence • Authenticity	**Social awareness** Understands others • People judgement • Emotional literacy Appreciates others • Positive regard • Trust radius
Management	**Self management** Demonstrates self regulation • Self control • Responsibility Demonstrates openness • Openness to change • Openness to feedback	**Social management** Exerts influence • Influence • Constructive discontent Builds relationships • Develops people • Develops collaboration
Motivation	**Self motivation** Drives for results • Initiative • Achievement orientation Drives for change • Optimism • Creativity	**Social motivation** Leads for results • Leads the vision • Leads the change Inspires commitment • Fosters team spirit • Communicates

Each of the major areas of the EIQ[3D] consists of four specific competencies (bulleted in Table 3) clustered into two competencies (normal, non-bold text in Table 3). Many of these competencies originate from the development of the leadership competencies on which the emotional intelligence 360° model and current questionnaire is based. The original competencies and the items used to assess these were developed from a series of critical incident interviews conducted with staff in leadership roles in a number of organisations.

Interviews and subsequent content analyses were designed to identify the competencies that differentiated an organisation's 'high fliers' and those seen as having high potential from their less able peers. Many of the items used to assess the competencies were also based on examples of behaviours obtained from the interviews, supplemented with additional items to reflect fully the breadth of each competency. By using this approach to competency development the results identified those competencies that defined exceptional performance, rather than those common to all those in leadership roles, as a person specification might.

Subsequent work involving the application of emotional intelligence concepts to personal and team development, identified significant points of overlap between the leadership competencies and aspects of emotional intelligence. This practical experience, in conjunction with the analysis of existing emotional intelligence models, led to the leadership competency model being refined and expanded into a model of emotional intelligence that has been extensively used through Team Focus's online 360° system.

Developing the EIQ3D questionnaire

To develop the current questionnaire, the items from the 360° competency model were first reviewed in relation to their current domain. Although such a review had been part of the initial development of the 360° tool, the opportunity for further review was taken so that the questionnaire would benefit from experience gained from the application of the 360° tool.

The next stage was to take each of the EIQ^{3D} items and develop a parallel version for the co-respondent. For example, for the statement:

I have a deep understanding and appreciation of how others think and feel

the following parallel statement was written:

Shows a deep understanding and appreciation of how others think and feel.

The parallel statements were then reviewed by occupational psychologists and other experienced assessors to ensure that the co-respondent's statements were clear and reflected behaviours that could be readily rated. To do this, the reviewers were instructed to think of a target person and check whether they could confidently give that person a rating on each item. A number of changes were made to the co-respondent's statements as a result of this review, particularly the removal of specific references to work contexts as it was appreciated that a suitable co-respondent may not always be someone who knows the target respondent through their work.

An option with the 360° system from which the EIQ^{3D} was developed, is to indicate that the person providing feedback has had 'limited exposure' to the target person with respect to the behaviour described in any statement. It was decided that this option should be retained for the EIQ^{3D} questionnaire to identify any areas where a lower level of confidence needed to be placed on the co-respondent's responses. The co-respondent therefore rates the respondent on all 144 statements, but after each statement they have the option of indicating 'limited exposure'. The use of the limited exposure option does not affect the score for the statement or how it contributes to the competency facet score, but the frequency with which the limited exposure option is used for each competency is reported and can be used to qualify the co-respondent's responses where limited exposure ratings are high.

The final round of development involved a check on the consistency of the competency facets. An examination of the internal consistencies showed three items that had very low item-total correlations, indicating that they were not assessing their intended competencies. These items were removed from the questionnaire. At this stage, a final review of the domain coverage of each competency facet was also conducted, in conjunction with the trialling data, with the goal of refining the questionnaire from seven to six items per scale. Redundant items, as determined from the review of each domain and those with weak item-total correlations were removed. This process resulted in the current 144 item version of the EIQ^{3D} questionnaire described in this User's Guide.

Section Three: Administering the EIQ³ᴰ

The EIQ³ᴰ is part of the Profiling for Success (PfS) online assessment system developed by Team Focus. To use the EIQ³ᴰ clients have to open a PfS account. Once a PfS account has been opened, this allows clients to manage all aspects of the assessment and reporting process. For information on opening and using a PfS account, please contact Team Focus (contact details are given at the front of this User's Guide).

Effective administration is important if the EIQ³ᴰ is to provide valid information. With the PfS online assessment system, assessments may be completed after a personal introduction from the administrator or after the respondent has been informed about the assessment through other means such as email or a letter. Whichever administration process is used, it is essential that respondents understand why they are being asked to complete the EIQ³ᴰ and how the information they give through the questionnaire will be used for their benefit. This ensures 'buy in' to the assessment and so encourages honesty and openness from respondents.

In this section, options for the administration of the EIQ³ᴰ are described along with guidance on how to conduct effective administration, whether in person or remotely. Details on the actual process of administration are also included along with the technical requirements of the PfS system.

The two versions of the EIQ3D

There are two ways in which the EIQ³ᴰ can be used to assess emotional intelligence. The first is to use the EIQ³ᴰ as a self-report questionnaire, where respondents are asked to indicate their level of agreement with 144 statements on a six-point scale anchored 'strongly disagree' (1) and 'strongly agree' (6).

The second method involves the respondent completing the EIQ³ᴰ as above, but then nominating a 'co-respondent' to complete the questionnaire about them. Providing an external person's perspective on the respondent overcomes one of the major limitations of self-report assessments and adds richness to the assessment data and so also to the development process.

The co-respondent's version of the questionnaire is essentially the same as the standard version with changes to the instructions and the phrasing of the questions. The instructions in this version ask the co-respondent to complete the questionnaire with reference to the main respondent. Changes to the phrasing of the statements were necessary to provide parallel versions that could be answered with reference to the self or with reference to another. For example, the following item in the self-report version:

> *People would say that I have lots of energy and determination even when things are difficult*

is rephrased for the co-respondent's version as:
> *He/she has lots of energy and determination even when things are difficult.*

The decision as to which version of the EIQ³ᴰ it is most appropriate to use will depend on the purpose to which the results are being put and the opportunity to identify an appropriate co-respondent and obtain their results in the time available.

Whichever version of the EIQ³ᴰ is being used, all administrators and others who will be involved in the interpretation of the questionnaire should complete it for themselves before using it with others. This is the best way to understand the requirements of the questionnaire, to answer any questions respondents may have and understand issues around the questionnaire that may be raised during the review of the results.

Administration options and the administration process

There are three options for administering the EIQ^{3D}:

- completion with an administrator present who gives the introduction;

- independent completion after a prior face-to-face introduction by an administrator;

- independent completion after receiving an introduction via email or letter from an administrator.

The EIQ^{3D} questionnaire does not require an administrator to be present, and has been developed and trialled accordingly. Full instructions are given at the beginning of the questionnaire along with examples to ensure that the respondent understands how to indicate their responses and use the six-point response scale. Whilst completing the questionnaire, respondents can also see a summary of the instructions at any time they wish.

Although an administrator does not need to be present at the time of completion, it is essential that the personal aspect of administration is not underestimated. Nor should it be assumed that the instructions given by the EIQ^{3D} questionnaire are sufficient in themselves. Good administration, whether in person or via letter or email, is key to getting the 'buy in' of the respondent to the assessment process. This, in turn, will enhance the validity of the assessment results through putting respondents in the appropriate mindset, and encouraging open and honest responding.

An introduction to either of the versions of the EIQ^{3D} should include the following points, whether delivered in person by the administrator or otherwise:

- the reason the respondent is being asked to complete the questionnaire;

- a broad description of what the questionnaire assesses, possibly including an overview of the EIQ^{3D} model, though there is no need to include a detailed description of each scale;

- the importance of being as honest as possible when completing the questionnaire;

- guidance that the EIQ^{3D} typically takes about 20 minutes to complete, but is untimed and respondents should work through at a fair pace and not spend too long pondering the questions as first answers are generally the best;

- an explanation of how the respondent will receive their profile from the EIQ^{3D} and how this will be used;

- a description of how the profile will be stored and who will have access to it.

When an administrator will not be present whilst the respondent completes the questionnaire, the following information should also be given:

- the url respondents should go to for access to the PfS website (www.profilingforsuccess.com/main);

- the Client code, Access code and Password they will need to enter when prompted;

- that the questionnaire normally takes between 20 and 30 minutes to complete and that it should be completed in a quiet environment free from distractions;

- contact details for the administrator in case of any questions or issues in accessing the PfS system.

Administration when using a 'co-respondent'

When using a co-respondent as part of the assessment process, it is important that the purpose behind this is clearly explained to the respondent and that they play an active part in agreeing to the process. The respondent must understand the purpose of the co-respondent as, although the administrator can guide them, the respondent needs to identify the most suitable person to act as the co-respondent. Engagement with the process at this early stage is also important for ensuring that the respondent will be committed to receiving the co-respondent's responses, whether positive or negative, and incorporating them into their personal development.

A co-respondent should be someone who knows the respondent well and has had sufficient contact with them over a period of time (it is suggested at least six months) to gain insight into their behaviour and so have the necessary understanding to complete the questionnaire. The co-respondent should also be someone who will provide honest responses and see the relevance of their contribution to the respondent's development. For the co-respondent's data from the EIQ^{3D} to be most useful for development, it is also important that they act as a 'critical friend'. Therefore the co-respondent should not be someone who the respondent expects to be overly positive about them, but rather someone who will provide a more objective and detached perspective. The administrator needs to support the respondent through the process of selecting a co-respondent and may need to question and prompt them to ensure that an appropriate person is selected.

When using the EIQ^{3D} with a co-respondent, the process of completing the questionnaire is as follows:

1. The administrator sets up the Access Code and Password as normal in the PfS Client Area and selects the 'EI Questionnaire (self and other)' from the list of assessments and the required report(s).

2. The administrator contacts the respondent and their co-respondent about completion of the EIQ^{3D}, providing the necessary information to both and emphasising to the co-respondent that they must complete the questionnaire only after the respondent has sent them the reference/ID number.

3. The respondent completes the EIQ^{3D}, selecting the 'self' option from the 'self' and 'other' options when asked who they are completing the questionnaire about.

4. After completing the questionnaire and submitting their results, the respondent receives a message from the PfS system containing the reference/ID number to pass to the co-respondent.

5. The respondent passes the reference/ID number to the co-respondent and they enter this along with the Client Code, Access Code and Password previously sent to them by the administrator.

6. The co-respondent selects the 'other' option from the 'self' and 'other' options when asked who they are completing the questionnaire about.

7. Reports for the EIQ^{3D} will be generated once the co-respondent has completed the questionnaire and submitted the results.

As with the respondent, it is important that the co-respondent also receives appropriate advice on completing the questionnaire, along with the necessary instructions and codes. This information should include the purpose of completing the questionnaire and why they have been chosen to complete it, the importance of openness and honesty, and how their results will be used and stored.

Requirements of the PfS online assessment system

As the EIQ^{3D} is delivered via the PfS online assessment system, administrators need to ensure that respondents have the necessary hardware and software to access the assessments. In practice, this is very rarely an issue as the PfS system has been developed to run on standard internet technology to make it as widely accessible as possible.

The requirements for users of the PfS system (clients/administrators and respondents) are:

- a PC or Mac with an internet connection (dial-up or broadband);

- a minimum screen resolution of 1024 by 768;

- Internet Explorer Version 6.0 or later (recommended browser);

- Macromedia Flash plugin.

Virtually all modern computers will meet the requirements. When using Internet Explorer, this will automatically check that the Macromedia Flash plugin is installed and, if not, prompt the user to install this. Installation of Macromedia Flash should take only a few seconds with a broadband internet connection and is completed without the need for any technical expertise on the part of the user.

When a respondent selects a PfS assessment for completion, the whole assessment is downloaded before it begins. This may take a short time with a dial-up connection (up to one minute for some assessments) but with a broadband connection will take only a few seconds.

It is not necessary for the internet connection to be maintained once an assessment has been downloaded. However, the internet connection does have to be active when the assessment results are submitted. Information about the need for respondents to be actively connected to the internet for their results to be recorded is displayed at the end of the assessment.

Section Four: Interpretation and review

This section of the User's Guide describes in detail the individual competencies and competencies that make up the EIQ^{3D}. Users should become familiar with these scales and appreciate how they fit into the model on which the EIQ^{3D} is based before working with respondents. It also gives an overview of the scores that are generated from the questionnaire and describes the computer-generated reports that are structured around the competency model.

The EIQ^{3D} can be used in a range of development situations. Some examples of these have been given on page 36, but these are not intended to be exhaustive and it is anticipated that users will expand on these to meet their own needs. The precise nature of the feedback and review with the respondent will depend on how the questionnaire is being used, but this section gives an overview of a standard review process. Users are encouraged to think of how these ideas may be adapted to best meet their needs so as to ensure the questionnaire has maximum impact on the development process.

Descriptions of the EIQ3D competency facets

The EIQ^{3D} is structured around six major areas. In each of these major areas there are two competencies and these, in turn, are sub-divided into two competency facets. This is shown graphically in Figure 1 below.

Major Areas	Competencies	Competency Facets
Self awareness	Shows self understanding	Self assessment
		Self literacy
	Shows self value	Self confidence
		Authenticity
Self management	Demonstrates self regulation	Self control
		Responsibility
	Demonstrates openness	Openness to change
		Openness to feedback
Self motivation	Drives for results	Initiative
		Achievement orientation
	Drives for change	Optimism
		Creativity
Social awareness	Understands others	People judgement
		Emotional literacy
	Appreciates others	Positive regard
		Trust radius
Social management	Exerts influence	Influence
		Constructive discontent
	Builds relationships	Develops people
		Develops collaboration
Social motivation	Leads for results	Leads the vision
		Leads the change
	Inspires commitment	Fosters team spirit
		Communicates

Figure 1: The structure of the EIQ^{3D}: major areas, competencies and competency facets
The definitions of each of the competencies and competency facets, arranged by major area, follow overleaf.

Self awareness

Shows self understanding

People with this characteristic have developed an accurate assessment of their own skills and abilities, feel comfortable describing their strengths and limitations and are non-defensive about them. They understand the complexity of their own emotions and can describe their reactions and the impact these have on others. 'Shows self understanding' is itself made up of two sub-competencies: Self assessment and Self literacy.

- **Self assessment**: Judges own strengths, limitations and inner resources realistically and discusses them openly and non-defensively.

- **Self literacy**: Recognises and can describe the complexity of own feelings, moods and reactions. Shows awareness of how these can impact on others.

Shows self value

People with this characteristic show a high level of self confidence and integrity without being arrogant. They are clearly 'their own person'. They approach challenges with a good understanding of what they want, and how it relates to their values which means that they are not subject to the usual pressures to be popular or conform. They take firm and principled positions and will take personal risks rather than compromise on important topics. They are seen to live their values and come across as trustworthy, honest and authentic. 'Shows self value' is itself made up of two sub-competencies: Self confidence and Authenticity.

- **Self confidence**: Has a strong sense of self worth and self belief. Demonstrates confidence in own opinions without appearing arrogant. Takes strong principled stands in the face of pressure.

- **Authenticity**: Comes across as honest and genuine. Shows a strong sense of integrity and can be relied on to deliver on promises. Creates a strong sense of being trustworthy and authentic.

Self management

Demonstrates self regulation

People with this characteristic are able to express their innermost thoughts and feelings under pressure with honesty, but without losing control. Their ability to regulate their emotions appropriately enables them to make clearer judgements and they can be relied on to deliver on promises made. 'Demonstrates self regulation' is itself made up of two sub-competencies: Self control and Responsibility.

- **Self control**: Manages internal states, impulses and resources in a mature and effective way such that negative emotions are controlled without dishonesty or repression and positive emotions are expressed without exaggeration.

- **Responsibility**: Can be relied on to take decisions and, when a commitment has been made, shows great conscientiousness in terms of fulfilling responsibilities and following through on promises.

Demonstrates openness

People with this characteristic are continually listening and learning. They do not get stuck into habits and outdated processes but continually seek new, relevant information which they use to update their view of themselves and their approach to situations. They also encourage others to do likewise and, with careful, non-defensive listening they are extremely adaptable to situations and changing demands. 'Demonstrates openness' is itself made up of two sub-competencies: Openness to change and Openness to feedback.

- **Openness to change**: Shows great flexibility in the face of changing circumstances, being willing to change path, adapt processes and re-prioritise activities in the light of new information.

- **Openness to feedback**: Acts as a role model in encouraging open dialogue. Actively gives and seeks feedback, demonstrates a willingness to listen and learn and is comfortable disclosing personal information. Admits mistakes which are used as opportunities to learn.

Self motivation

Drives for results

People with this characteristic show energy and determination in the pursuit of their goals. They willingly take the initiative in order to achieve their targets but they also set themselves personal challenges such that they develop and grow in the process. 'Drives for results' is itself made up of two sub-competencies: Initiative and Achievement orientation.

- **Initiative**: Shows ingenuity, determination and a willingness to take the initiative. Regularly challenges the status quo and gets round red tape such that results are achieved in spite of difficulties and obstacles.

- **Achievement orientation**: Demonstrates energy and determination to meet an internal standard of excellence. Sets stretching personal challenges which means that their capabilities are continually improving.

Drives for change

People with this characteristic show energy and imagination as they continually stimulate new ideas and opportunities. They remain positive and optimistic even when things look bad and they encourage others to accept the need to adapt and change. 'Drives for change' is itself made up of two sub-competencies: Optimism and Creativity.

- **Optimism**: Looks on the bright side of life and maintains a positive attitude in spite of adversity. Has a deep-seated belief that things will work out and that some good will come from any situation no matter how bad it seems at the time.

- **Creativity**: Stimulated by change and innovation. Shows creativity and courage in bringing new ideas to situations. Sees beyond the present and driven to create a better future.

Social awareness

Understands others

People with this characteristic show an ability to read people with uncanny accuracy, recognising their strengths and limitations and understanding their issues and concerns. They can explain what is important to others and show an ability to see matters from other people's point of view. 'Understands others' is itself made up of two sub-competencies: People judgement and Emotional literacy.

- **People judgement**: Is perceptive and a good judge of character. Is interested in people and can describe their strengths, limitations and motivations after only a short period of acquaintance.

- **Emotional literacy**: Shows great awareness of the needs, feelings and concerns of others. Can describe what is important in the lives of people around them and has an intuitive understanding of the issues they face and how they will react.

Appreciates others

People with this characteristic help others to feel valued by listening, understanding and being slow to judge and quick to forgive. They show genuine care and concern for others regardless of status or background. 'Appreciates others' is itself made up of two sub-competencies: Positive regard and Trust radius.

- **Positive regard**: Takes an active interest in the lives of others and demonstrates respect for them and their point of view. Aware of their feelings and needs, they are seen as empathic and help people to feel valued.

- **Trust radius**: Trusts a wide range of people without being naïve. Widens the circle of openness and trust by being slow to judge and quick to forgive.

Social management

Exerts influence

People with this characteristic are not afraid to get involved in situations which may be interpersonally demanding. They do not avoid conflict and use their considerable skill to get a reasonable resolution. They have the ability to influence others in a way which is both positive and gains commitment. 'Exerts influence' is itself made up of two sub-competencies: Influence and Constructive discontent.

- **Influence**: Demonstrates skill and flexibility in persuading others, using a variety of methods and styles. Shows sensitivity and understanding of the individuals concerned which helps win hearts as well as minds.

- **Constructive discontent**: Is willing to confront issues and to manage conflict in a direct and timely manner. Is seen to be firm but fair and generally able to find a way to make the best of difficult situations.

Builds relationships

People with this characteristic are socially skilled and interested in building relationships with a wide range of people. They maintain useful networks of contacts and bring people together in a spirit of collaboration. They are encouraging and supportive in a way which makes people want to learn, grow and collaborate. 'Builds relationships' is itself made up of two sub-competencies: Develops people and Develops collaboration.

- **Develops people**: Encourages others to learn and grow. Makes appropriate use of delegation, coaching and encouragement to create an environment in which people want to learn and feel safe to make mistakes.

- **Develops collaboration**: Builds long-term relationships and maintains useful networks of contacts. Makes good use of their social skill for making new contacts, bringing people from diverse areas together and spotting opportunities for collaboration.

Social motivation

Leads for results

People with this characteristic are stimulated by change and the future. They work hard to create a shared vision and to communicate it with enthusiasm so that people become committed to the change process. They do not 'sell their vision' but instead they work to create one which is shared through involvement of those concerned. 'Leads for results' is itself made up of two sub-competencies: Leads the vision and Leads the change.

- **Leads the vision**: Is focussed on what the future will look like. Works with others to create and articulate a compelling vision in which others feel involved, committed and motivated.

- **Leads the change**: Stimulated by change. Sows the seeds, generates ideas and explains the benefits such that people become energised and willing to participate and contribute to the change process.

Inspires commitment

People with this characteristic have a highly engaging style. Their interpersonal skills and their focus on people create a climate of participation and enthusiasm. They demonstrate an ability to articulate messages and to communicate in a fluent, interesting and engaging way. 'Inspires commitment' is itself made up of two sub-competencies: Fosters team spirit and Communicates.

- **Fosters team spirit**: Creates a climate of participation through interaction, co-operation, enthusiasm and encouragement.

- **Communicates**: Fluent, interesting and engaging. Convinces by being coherent and achieving clarity and impact.

EIQ³ᴰ scores

Two types of scores are generated from the EIQ³ᴰ: raw scores and standardised scores.

For each statement respondents and co-respondents indicate their level of agreement on a six-point scale anchored 'strongly disagree' and 'strongly agree'. Raw scores are calculated as the mean of the responses to all statements in the scale, and so all scales have a possible limit of 1 to 6.

Raw scores need to be interpreted in relation to the six-point scale, so indicating the respondent's view of their own level of competence. As a guide, it is suggested that the interpretations given below are used as a starting point for exploring raw scores:

- scores in the range of 1 up to 3: scores in this range suggest that the respondent does not feel that they have a high level of the competency in question and may feel that it is an area they need to develop;

- scores in the range from 3 up to 4: scores in this range suggest that the respondent has a moderate level of the competency, though they may be unsure whether their abilities are always sufficient and so see this as a potential area for development;

- scores in the range from 4 up to 6: scores in this range suggest that the respondent is relatively confident that they have the competency, though it is still worth exploring whether they believe they would benefit from further development.

Raw scores are used as the primary method of interpretation as the EIQ³ᴰ is focussed on an individual's self-perception of their competencies. The direct indication of the respondent's views avoids the skewing that can be caused by the use of norm groups. For example, on a scale with a relatively high average rating, a respondent can appear below average normatively even if they are confident of their competence in the area in question. The use of raw scores may also make it easier to understand the respondent's relative view of their competencies in relation to each other, particularly if their pattern of responses across the scales is different from that typical of the norm group.

Normative scores are given in the administrator's report and are used to indicate how a respondent's score on a particular scale compares to that of the norm group. The norm group on which these scores are based is described in the section on the composition of the analysis sample (pages 39 to 40).

Understanding EIQ3D reports

Two reports are available for the EIQ[3D]:

- a feedback report and

- an administrator's report.

The EIQ[3D] feedback reports contain a comprehensive analysis of the respondent's self-ratings, and those of the co-respondent if this version of the questionnaire has been used. Reports give an overview of scores on major areas followed by a breakdown of the 24 competencies grouped by major area. Illustrations of the main sections from the EIQ[3D] reports are given below, along with notes for guidance on interpretation. A technical description of how the reports are generated by the Profiling for Success assessment system is given in the Appendix. The administrator's report provides a summary of the key data derived from the EIQ[3D], including the mean raw scores and normalised sten scores.

Feedback report. An introduction to the feedback report is given on the first page along with a summary of the six major areas as a bar chart (Figure 2). Each section of the bar chart includes a value, indicating the mean response to the four competencies that comprise each major area. Values are given on a 6-point scale from 1 to 6, with higher values indicating higher levels of the competency in question. When the co-respondent version of the EIQ[3D] has been used, two sets of values are displayed: the respondent's ('your own view') and those of the co-respondent ('your co-respondent's feedback') as shown in the figure below.
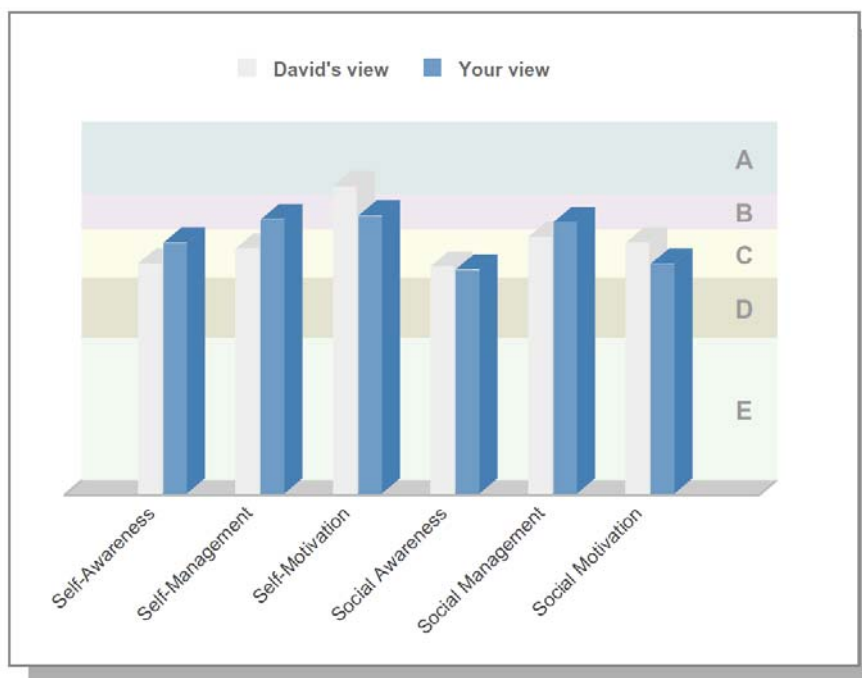
Figure 2: EIQ[3D] bar graph summarising respondent's and co-respondent's mean responses to the six major areas

The EIQ³ᴰ competency model is shown on the second page of the report (Figure 3), illustrating how the major areas are subdivided into competencies. The 'score' column gives a graphical representation of the respondent's score on each of the 12 competencies.

Area	Competency	Range	Blue = Your own view Grey = David's view
Self-Awareness	Self-Understanding	C / C	
	Self-Value	B / C	
Self-Management	Self-Regulation	A / B	
	Openness	B / C	
Self-Motivation	Drives for Results	B / A	
	Drives for Change	B / B	
Social Awareness	Understands Others	D / C	
	Appreciates Others	B / C	
Social Management	Exerts Influence	A / B	
	Builds Relationships	C / C	
Social Motivation	Leads for Results	B / A	
	Inspires Commitment	D / C	

Figure 3: EIQ³ᴰ competency model and graphical illustration of the respondent's and co-respondent's scores for each competency

The majority of the EIQ³ᴰ report is organised according to major areas. At the start of each section is a brief definition for the major area followed by a graphical presentation of the respondent's and, where appropriate, co-respondent's scores for the two underlying competencies. For example Figure 4 gives an illustration from the major area 'Self awareness', showing that the underlying competencies are 'Self-Understanding' and 'Self-Value'. For the competency 'Self-Understanding' the respondent's mean score is 4.42 and their co-respondent has given them a mean score of 4.00.
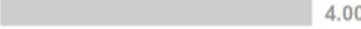
Area	Competency	Range	Blue = Your own view	Grey = David's view
Self-Awareness	Self-Understanding	C	4.42	
		C		4.00
	Self-Value	B	4.58	
		C		4.42

Figure 4: Example summary of a major area showing the respondent's and co-respondent's scores on each competency

The narrative text for the EIQ³ᴰ report provides an indication of what the scores might mean together with how the co-respondent either agrees or disagrees with your own view. It also provides some ideas and activities for those areas that might benefit most from further development

When a co-respondent has been included in the assessment process, there is an additional page at the end of the report showing any areas where they were not confident in their responses due to limited knowledge. When completing the questionnaire, co-respondents can indicate for any statement if they feel they have 'limited exposure' to the respondent's behaviour described in the competency. The use of this limited exposure option is summarised by competency in a table like that shown in Figure 5.

It is recommended that the co-respondent's response on any competency where the number of limited exposure ('uncertain' items) exceeds four is treated with caution. Caution is warranted under these circumstances, as 50 per cent or more of the items that make up the competency will be based on limited exposure. This is also described in the report.

Competencies	No. of 'uncertain' items
Self-Understanding	1
Self-Value	0
Self-Regulation	1
Openness	1
Drives for Results	1
Drives for Change	1
Understand Others	0
Appreciate Others	1
Exerts Influence	1
Builds Relationships	0
Leads for Results	0
Inspires Commitment	0

Figure 5: Example table showing number of statements in each competency where co-respondent indicated 'limited exposure'

Administrator's report. The administrator's report contains the same information but without the narrative. However, it provides two extra areas of interest. The first is a graph of the scores based on comparison to a norm group using the STEN scale[1]. The default comparison group is 399 participants at training and developmental workshops. The second additional information is a table of scores which show a further subdivision of the competencies into 2 facets. For example Self-Understanding has two facets called Self-Assessment and Self Literacy which are defined in more detail on page 29 of this manual. This allows the facilitator to explore the area at a finer level if this is deemed appropriate.

If the co-respondent's version of the EIQ[3D] has been used, a second set of columns give the raw scores and stens for the co-respondent. The second page of the administrator's report shows the data for the limited exposure responses, as in the feedback report discussed above (Figure 5).

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[1] STENS are standardised scores with a mean of 5.5 and a standard deviation of 2, and a range from 1 to 10. Sten scores of 5.5 therefore represent an average score in relation to the comparison group (described in section five). As these scores are normally distributed, 68 per cent of the comparison group will have scores between 3.5 and 7.5, and 96 per cent between 1.5 and 9.5.

	Susan Sample		David Demonstration	
	Raw	Sten	Raw	Sten
Self-Awareness	**4.50**	**6**	**4.21**	**5**
Self-Understanding	4.42	6	4.00	5
Self Assessment	4.00	4	3.83	4
Self Literacy	4.83	7	4.17	5
Self-Value	4.58	6	4.42	5
Self Confidence	4.00	5	5.17	8
Authenticity	5.17	7	3.67	3
Self-Management	**4.83**	**8**	**4.42**	**5**
Self-Regulation	5.08	8	4.50	5
Self Control	4.50	6	4.17	4
Responsibility	5.67	10	4.83	6
Openness	4.58	6	4.33	5
Openness to Change	4.17	5	4.83	7
Openness to Feedback	5.00	8	3.83	4
Self-Motivation	**4.88**	**7**	**5.29**	**8**
Drives for Results	4.92	7	5.58	8
Initiative	4.67	6	5.50	8
Achievement Orientation	5.17	7	5.67	8
Drives for Change	4.83	8	5.00	7
Optimism	4.50	6	5.00	7
Creativity	5.17	8	5.00	7
Social Awareness	**4.13**	**5**	**4.17**	**5**
Understands Others	3.67	4	4.25	6
People Judgement	3.17	3	4.33	6
Emotional Literacy	4.17	6	4.17	5
Appreciates Others	4.58	6	4.08	5
Positive Regard	4.83	6	3.83	4
Trust Radius	4.33	6	4.33	5
Social Management	**4.79**	**8**	**4.58**	**6**
Exerts Influence	5.17	9	4.75	6
Influence	4.83	8	5.00	8
Constructive Discontent	5.50	10	4.50	6
Builds Relationships	4.42	6	4.42	5
Develops People	4.83	7	4.00	4
Develops Collaboration	4.00	5	4.83	7
Social Motivation	**4.21**	**6**	**4.50**	**6**
Leads for Results	4.67	7	5.17	8
Leads the Vision	4.33	6	5.17	8
Leads the Change	5.00	8	5.17	8
Inspires Commitment	3.75	4	3.83	4
Fosters Team Spirit	4.83	7	3.83	4
Communicates	2.67	3	3.83	5

Figure 6: Example table from the administrator's report showing the average raw score and sten for the first four major areas and competencies

Conducting a review session

The results from the EIQ^{3D} should always be reviewed with the respondent. As with the output from any psychometric assessment, the EIQ^{3D} results should be treated as a starting point for further exploration and clarification. Without adequate review, the respondent may over-interpret the results and place greater emphasis on their validity than is warranted. The review session therefore allows the respondent an opportunity to challenge the results in the report and find a balance between their results and personal perceptions that allows them to move forward in their development. Further, although the questionnaire is generally positively worded, the review also allows clarification of any issues so ensuring that misunderstandings on the part of the respondent do not occur.

The exact format of the review will depend on the purpose of assessment and how the results are to be used. It is recommended that the review is conducted face-to-face, though a telephone review may be acceptable in some circumstances. The review will be particularly important when a co-respondent has contributed to the assessment process, as this may raise more issues for the respondent which they need to work through in a facilitated and supportive environment.

The reviewer will need to decide whether a report is sent directly to the respondent when setting up the access code for the EIQ^{3D}. Receiving the report ahead of the review session will give the respondent time to read and start to work through it to identify issues that are particularly pertinent to them. This process will give more time for discussion during the review session and is likely to be particularly beneficial to respondents who need time to reflect on their report before discussing it. Providing that the administration has been conducted thoroughly and respondents understand the purpose of the assessment and how it will be used, there should be no issues in reports being sent directly to respondents. If respondents do, however, seem particularly sensitive to feedback, careful consideration needs to be given to whether reports from the co-respondent version should be sent directly to the respondent or introduced by the reviewer as part of the review session.

The purpose of a review session, whether conducted face-to-face or via the telephone, is to ensure that the respondent clearly understands the meaning of their results and is satisfied with the assessment experience, and to explore possible implications of the results. To reach this goal it is important that the review session is seen as a chance for information to be shared between the respondent and the reviewer, not simply for the reviewer to provide the questionnaire scores. For this process to be successful, it is vital that all reviewers have received appropriate training and are themselves familiar with the EIQ^{3D} and the nature of its reports.

General guidelines for conducting review sessions are given below. These guidelines should be seen as identifying the main points that need to be covered and giving suggestions about the structure of the review session and appropriate questioning strategies. They do not set out to provide a set formula that must be followed.

- As with administration, good preparation is essential for review sessions. A suitable room, free from disturbances, should be used. Reviewers should familiarise themselves with the respondent's results, the EIQ^{3D} scales and how they may want to introduce the EIQ^{3D} model as a way of supporting the interpretation. Reports should be sent out to respondents in good time before the review session, if they have not received them directly from the Profiling for Success assessment system.

- The review session should begin with the reviewer introducing themselves and providing a brief overview of the review session. Useful information to offer includes reiterating the overall purpose the questionnaire is being used for, the approximate length of the session, issues around confidentiality and what will happen to the questionnaire results.

- Both parties need to agree on what they want to get out of the review session and be clear on how the profile will be used before working through the report. Such agreement will ensure a common purpose to the review, encourage rapport and reduce the chance for misunderstandings.

- To encourage a balanced discussion from the outset, the respondent should be brought into the review session as early as possible. This can be done through asking them about their experiences of the questionnaire immediately after the brief introduction (e.g. "How did you find completing the questionnaire?" or "Tell me about your experience of completing the questionnaire."). Throughout the review session open questions should be used wherever possible, as this will encourage the respondent to provide more information and make the review more balanced. In a balanced review session the respondent should contribute at least as much as the reviewer to the discussion, if not more.

- The next stage will usually involve discussion of the actual questionnaire profile. There is no set order in which the EIQ^{3D} scales have to be reviewed. If previous discussions with the respondent have identified specific areas of interest, the discussion may focus on these and spend less time on other areas. An alternative strategy is to ask the respondent to identify any areas where the questionnaire has revealed surprising results and start by exploring these. If there are no specific areas being targeted, it is suggested that the review is structured according to the major areas of the EIQ^{3D}, taking each of the areas in turn.

- The EIQ^{3D} is a tool to stimulate personal development, so the next stages in the development process need to be the focus of the final part of the review. Both parties should mutually agree a way forward. Points that may be included are how the issues that have been discussed will be captured, what actions the respondent has agreed to and time scales for development activities, what support the reviewer or others in the organisation need to give the respondent, and how any development activities will be monitored and reviewed. Finally, the respondent should be offered the opportunity to ask any outstanding questions and then thanked for attending the review session.

- It is good practice for individual organisations to develop policies around the review of assessment results, as with other aspects of psychological assessment. These should cover issues such as how reviews are conducted, confidentiality and storage of assessment data. It is important for organisations to develop their own policies, as these will help ensure consistency of approach and application over time, and will also guard against issues of fairness and discrimination. Whilst policies may draw on the guidelines given above, ultimately reviewers may develop their own style with which they feel comfortable within these frameworks.

Section Five: Technical information

This section of the User's Guide provides a detailed account of the technical functioning of the EIQ^{3D}. A description and analysis of the sample on which the technical information is based is followed by descriptive statistics, and data relating to the reliability and validity of the EIQ^{3D}. The effect of background factors such as age, sex and ethnicity on EIQ^{3D} is also explored.

Composition of the analysis sample

The sample on which the data in this section is based was comprised of 1405 respondents who completed the EIQ^{3D} between November 2006 and January 2007. The mean age of the sample was 33.13 (SD=10.4), and there were 677 (48.2%) males and 728 (51.8%) females.

Information on ethnic background was provided by 1386 (98.6%) of the standardisation sample and is shown in Table 4.

Table 4: Ethnic background of the standardisation sample (n=1386)		
Ethnic category	Number	Percentage of standardisation sample
White		
White	377	27.20
Irish	37	2.67
Any other White background	334	24.10
Mixed		
White and Black Caribbean	7	0.51
White and Black African	12	0.87
White and Asian	11	0.79
Any other Mixed background	44	3.17
Asian or Asian British		
Indian	312	22.51
Pakistani	12	0.87
Bangladeshi	3	0.22
Any other Asian Background	60	4.33
Black or Black British		
Caribbean	22	1.59
African	79	5.70
Any other Black Background	6	0.43
Chinese or Other Ethnic Group		
Chinese	52	3.75
Any other	18	1.30

Descriptive statistics

The descriptive statistics for the EIQ³ᴰ are shown in Table 5. Each of the 24 competency facets is comprised of 6 statements rated from 1 (strongly disagree) to 6 (strongly agree). The 24 competency facets can be grouped into 12 competencies and six major areas. The means of the responses to the statements that form each of the competency facets, competencies and major areas are shown in Table 5, so that each is on a common scale with a possible range of 1 to 6.

Table 5: Minimum, maximum, mean and SD for the EIQ³ᴰ competency facets, competencies and major areas (n=1405)			
	Minimum	Maximum	Mean	SD
Self awareness	1.82	6.00	4.36	0.60
Shows self understanding	1.57	6.00	4.32	0.71
Self assessment	1.57	6.00	4.39	0.70
Self literacy	1.00	6.00	4.24	0.87
Shows self value	1.86	6.00	4.41	0.62
Self confidence	1.43	6.00	4.30	0.73
Authenticity	1.57	6.00	4.51	0.66
Self management	1.25	6.00	4.35	0.64
Demonstrates self regulation	1.29	6.00	4.47	0.72
Self control	1.29	6.00	4.18	0.84
Responsibility	1.00	6.00	4.76	0.76
Demonstrates openness	1.21	6.00	4.24	0.66
Openness to change	1.14	6.00	4.43	0.74
Openness to feedback	1.29	6.00	4.05	0.77
Self motivation	1.86	5.82	4.53	0.65
Drives for results	2.07	5.86	4.60	0.62
Initiative	1.57	6.00	4.52	0.70
Achievement orientation	2.14	6.00	4.67	0.64
Drives for change	1.29	6.00	4.47	0.76
Optimism	1.00	6.00	4.54	0.90
Creativity	1.14	6.00	4.40	0.79
Social awareness	1.75	5.71	4.28	0.56
Understands others	1.64	5.64	4.16	0.55
People judgement	2.00	5.29	3.85	0.53
Emotional literacy	1.00	6.00	4.48	0.72
Appreciates others	1.86	6.00	4.40	0.68
Positive regard	1.57	6.00	4.62	0.81
Trust radius	1.43	6.00	4.18	0.71
Social management	1.32	6.00	4.34	0.67
Exerts influence	1.14	6.00	4.38	0.67
Influence	1.14	6.00	4.45	0.71
Constructive discontent	1.14	6.00	4.32	0.77
Builds relationships	1.50	6.00	4.29	0.75
Develops people	1.57	6.00	4.27	0.75
Develops collaboration	1.00	6.00	4.31	0.90
Social motivation	1.54	6.00	4.28	0.67
Leads for results	1.36	6.00	4.33	0.70
Leads the vision	1.29	6.00	4.25	0.76
Leads the change	1.14	6.00	4.40	0.74
Inspires commitment	1.71	6.00	4.24	0.74
Fosters team spirit	2.00	6.00	4.36	0.71
Communicates	1.29	6.00	4.12	0.94

The concept of reliability

No assessment instrument, including the EIQ^{3D}, gives a perfect indication of the constructs it is measuring. Despite rigorous development and appropriate use and administration of the questionnaire, there will always be some degree of error in any assessment result. The concept of reliability is concerned with quantifying the amount of error in an assessment, so scores can be used sensitively with due regard to this error.

Good psychometric assessments have the advantage that their error is made explicit. In many other forms of assessment, no recognition of error is made and scores or results are treated as absolute truths. A good example of this is exam grades or degree classes, which often contain more error than psychometric assessments despite there being no acknowledgement of this error.

According to classical test theory, any assessment score is made up of two components: true score and error score. A person's true score is their hypothetical score on the trait being measured. For the EIQ^{3D}, the true scores refer to a person's scores on the 24 competency facets. However, scores obtained from assessments also contain an error component. Error in scores can come from three sources: the assessment itself, the person taking the assessment and the situation in which the assessment is being taken.

- Test error – Classical test theory assumes assessments are made up from a sample of items taken from the universe of all possible items. As with any sample, this will contain a degree of error. As all people taking an assessment answer the same set of items, error is systematic error, being the same for each respondent. Providing that adequate content validity has been ensured, test error is less of a concern to users than individual or situational error.

- Individual error – The individuals who take the assessment are a source of random error. Factors such as how the person is feeling, their motivations and attitudes towards completing the questionnaire and their familiarity with psychometric assessments will all affect how they perform, but are not necessarily related to their actual preferences. The major way in which individual error can be overcome is to make sure that respondents complete the EIQ^{3D} in the right 'mindset' (see Section Three on Administration).

- Situational error – The conditions under which people complete the EIQ^{3D} are a further source of random error. The guidelines on administration aim to make the assessment experience as similar as possible for all test takers. However, it is not possible to standardise the assessment situation completely, particularly given the freedom that internet-based assessment offers for completing assessments under different conditions.

Reliability statistics

In practice, reliability is typically assessed in three ways. The first of these is to look at how the items in the questionnaire's scales 'hang' together to form a coherent assessment of the construct under consideration. This 'internal consistency' is found by taking the mean of the correlation between each item and its scale total excluding that item. Internal consistency is calculated through a formula known as Cronbach's Coefficient Alpha and expressed as a statistic that can range from 0 to 1. The closer to 1, the more reliable the assessment is said to be.

The second way in which reliability is assessed is through looking at how consistent results are over time. This is done through administering the assessment at one point in time and then again sometime later. The scores from the two administrations are then correlated with each other to give an indication of 'test-retest' reliability. As with internal consistency, the closer the test-retest correlation coefficient is to 1, the more reliable the assessment is seen to be.

A further way in which reliability can be assessed is through parallel, or alternate, forms of the questionnaire. Typically, parallel forms are administered back-to-back and the results from the two are correlated, as when assessing test-retest reliability.

Each of the statistics described above provides an index of reliability, but does not directly indicate the degree of error in a given scale score. The standard error of measurement (SEM) provides a way of quantifying the error in the scores from each of an instrument's scales, indicating the range within which a person's true score on each scale is likely to fall. The SEM is derived from the following formula:

$$SEM = SD\sqrt{1 - r}$$

where SD is the standard deviation of the scale in raw score units and r is the reliability (in this case internal consistency) of the test. The reliability coefficients and SEMs for the EIQ[3D] scales are shown in Table 6 overleaf.

Table 6: Internal consistency reliabilities and SEMs for the EIQ^{3D} competency facets, competencies and major areas (n=1405)		
	Internal consistency	SEM
Self awareness	0.87	0.22
Shows self understanding	0.80	0.32
Self assessment	0.63	0.43
Self literacy	0.73	0.45
Shows self value	0.79	0.28
Self confidence	0.76	0.36
Authenticity	0.56	0.44
Self management	0.89	0.21
Demonstrates self regulation	0.83	0.30
Self control	0.76	0.41
Responsibility	0.74	0.39
Demonstrates openness	0.79	0.30
Openness to change	0.71	0.40
Openness to feedback	0.66	0.45
Self motivation	0.92	0.18
Drives for results	0.89	0.21
Initiative	0.83	0.29
Achievement orientation	0.81	0.28
Drives for change	0.86	0.28
Optimism	0.80	0.40
Creativity	0.80	0.35
Social awareness	0.87	0.20
Understands others	0.77	0.26
People judgement	0.55	0.36
Emotional literacy	0.70	0.39
Appreciates others	0.80	0.30
Positive regard	0.76	0.40
Trust radius	0.60	0.45
Social management	0.91	0.20
Exerts influence	0.84	0.27
Influence	0.73	0.37
Constructive discontent	0.75	0.39
Builds relationships	0.86	0.28
Develops people	0.75	0.38
Develops collaboration	0.79	0.41
Social motivation	0.92	0.19
Leads for results	0.86	0.26
Leads the vision	0.81	0.33
Leads the change	0.77	0.35
Inspires commitment	0.85	0.29
Fosters team spirit	0.71	0.38
Communicates	0.83	0.39

A number of factors can affect the reliability and the SEM statistics, though the main ones are the number of questions per scale and the breadth of domain coverage. The number of questions in each scale is an important determinant of its reliability. Classical test theory assumes that any scale is made up of a sample of items from the domain being assessed. As with any sample, the results from it should be more accurate as the sample becomes larger. Hence, there is a trade-off between reliability and practicality: higher reliability is generally seen as desirable, but if an assessment takes a long time to complete, very few people will choose to use it.

The reliability values in Table 6 clearly show the effect on increased scale length. Each of the competency facets consist of six items each and, whilst the majority of the reliability coefficients are very good for such short scales, these are lower than the reliabilities for the competencies which, in turn, are lower than those for the major areas.

The item-total correlations for the 24 competency facets are shown in Table 7. These values show the correlation coefficient between each individual item and its competency facet total, once the contribution of the item in question has been removed from the scale.

Table 7: Item-total correlations for the EIQ³ᴰ competency facets (n=1405)				
Scale and item		Item-total	Scale and item		Item-total
Self awareness			**Social awareness**		
Shows self understanding			Understands others		
Self assessment	1	0.44	People judgement	1	0.31
	2	0.33		2	0.42
	3	0.36		3	0.18
	4	0.24		4	0.31
	5	0.38		5	0.17
	6	0.49		6	0.36
Self literacy	1	0.55	Emotional literacy	1	0.47
	2	0.44		2	0.44
	3	0.49		3	0.46
	4	0.43		4	0.43
	5	0.40		5	0.36
	6	0.53		6	0.45
Shows self value			Appreciates others		
Self confidence	1	0.50	Positive regard	1	0.46
	2	0.22		2	0.43
	3	0.67		3	0.53
	4	0.68		4	0.51
	5	0.61		5	0.61
	6	0.39		6	0.49
Authenticity	1	0.40	Trust radius	1	0.28
	2	0.27		2	0.29
	3	0.21		3	0.33
	4	0.22		4	0.44
	5	0.44		5	0.44
	6	0.39		6	0.29
Self management			**Social management**		
Demonstrates self regulation			Exerts influence		
Self control	1	0.47	Influence	1	0.33
	2	0.46		2	0.57
	3	0.45		3	0.56
	4	0.60		4	0.58
	5	0.52		5	0.33
	6	0.50		6	0.48
Responsibility	1	0.51	Constructive discontent	1	0.49
	2	0.46		2	0.53
	3	0.59		3	0.55
	4	0.45		4	0.58
	5	0.43		5	0.59
	6	0.50		6	0.27

Demonstrates openness			Builds relationships		
Openness to change	1	0.48	Develops people	1	0.51
	2	0.53		2	0.19
	3	0.35		3	0.52
	4	0.55		4	0.59
	5	0.37		5	0.61
	6	0.43		6	0.61
Openness to feedback	1	0.39	Develops collaboration	1	0.56
	2	0.40		2	0.56
	3	0.44		3	0.66
	4	0.31		4	0.34
	5	0.35		5	0.60
	6	0.48		6	0.63
Self motivation			**Social motivation**		
Drives for results			Leads for results		
Initiative	1	0.59	Leads the vision	1	0.69
	2	0.57		2	0.66
	3	0.57		3	0.69
	4	0.58		4	0.50
	5	0.61		5	0.31
	6	0.63		6	0.66
Achievement orientation	1	0.64	Leads the change	1	0.44
	2	0.59		2	0.65
	3	0.58		3	0.56
	4	0.49		4	0.60
	5	0.68		5	0.29
	6	0.57		6	0.62
Drives for change			Inspires commitment		
Optimism	1	0.60	Fosters team spirit	1	0.47
	2	0.58		2	0.53
	3	0.65		3	0.58
	4	0.44		4	0.40
	5	0.49		5	0.43
	6	0.64		6	0.31
Creativity	1	0.69	Communicates	1	0.68
	2	0.53		2	0.67
	3	0.42		3	0.69
	4	0.66		4	0.56
	5	0.58		5	0.66
	6	0.50		6	0.47

Validity

The primary validity of the EIQ^{3D} stems from its development as a competency-based model of emotional intelligence, derived through in-depth interviews, subsequent rational analysis of the interview content and the structuring of this content into the EIQ^{3D} model, as described on pages 13 to 18. Further evidence for validity can be found from examining how the EIQ^{3D} scales are associated with each other, as can be seen in Tables 8 to 12.

Correlations at the level of the competency facets can be seen in Table 8. The average correlation between the competencies was 0.53, indicating that approximately 28 per cent of variance was shared between the scales on average (shared variance being the square of the correlation coefficient). The correlations of the competency facets that make up each major area are shaded, and the average correlation in each of these areas being 0.59.

A corresponding analysis of the competencies is shown in Table 9, where the average correlation between competencies is 0.66 indicating that just under 44 per cent of the variance is shared between groups. The average correlation between the pairs of competencies that form each major area is 0.7.

Correlations between the major areas are shown in Table 10, where the average correlation is 0.76 indicating approximately 58 per cent of variance in common between the major areas. The increasing levels of correlation seen from competency facets, to competencies and then major areas can be explained through the increase in reliability caused by the longer length of the scales (see Table 6 for reliability figures).

Table 8: Intercorrelations of the EIQ^{3D} competency facets

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 Self assessment																							
2 Self literacy	0.60																						
3 Self confidence	0.61	0.53																					
4 Authenticity	0.49	0.48	0.59																				
5 Self control	0.56	0.49	0.61	0.56																			
6 Responsibility	0.58	0.49	0.68	0.66	0.63																		
7 Openness to change	0.52	0.42	0.56	0.45	0.52	0.59																	
8 Openness to feedback	0.55	0.47	0.48	0.48	0.61	0.51	0.52																
9 Initiative	0.50	0.43	0.62	0.51	0.51	0.69	0.63	0.44															
10 Achievement orientation	0.47	0.37	0.57	0.47	0.37	0.63	0.57	0.34	0.68														
11 Optimism	0.61	0.50	0.72	0.55	0.63	0.68	0.63	0.54	0.68	0.62													
12 Creativity	0.47	0.42	0.56	0.45	0.45	0.53	0.61	0.43	0.64	0.56	0.62												
13 People judgement	0.45	0.42	0.46	0.44	0.55	0.43	0.35	0.44	0.34	0.23	0.41	0.34											
14 Emotional literacy	0.54	0.59	0.51	0.50	0.56	0.50	0.46	0.48	0.43	0.38	0.50	0.47	0.54										
15 Positive regard	0.46	0.47	0.43	0.53	0.59	0.46	0.42	0.54	0.33	0.29	0.49	0.37	0.46	0.63									
16 Trust radius	0.47	0.43	0.42	0.46	0.52	0.45	0.47	0.58	0.39	0.32	0.53	0.38	0.36	0.52	0.60								
17 Influence	0.58	0.54	0.55	0.55	0.64	0.57	0.54	0.57	0.52	0.42	0.60	0.52	0.49	0.67	0.71	0.59							
18 Constructive discontent	0.61	0.55	0.66	0.62	0.64	0.68	0.57	0.58	0.61	0.50	0.68	0.55	0.48	0.57	0.53	0.51	0.64						
19 Develops people	0.46	0.46	0.46	0.48	0.52	0.48	0.46	0.53	0.43	0.39	0.53	0.48	0.41	0.57	0.68	0.53	0.62	0.58					
20 Develops collaboration	0.51	0.50	0.55	0.51	0.55	0.57	0.53	0.54	0.54	0.49	0.64	0.54	0.42	0.58	0.60	0.53	0.67	0.66	0.64				
21 Leads the vision	0.57	0.53	0.64	0.55	0.56	0.62	0.61	0.52	0.66	0.59	0.70	0.70	0.45	0.59	0.53	0.50	0.69	0.71	0.62	0.69			
22 Leads the change	0.54	0.49	0.60	0.48	0.53	0.58	0.69	0.51	0.64	0.58	0.67	0.75	0.38	0.56	0.50	0.47	0.64	0.62	0.62	0.65	0.76		
23 Fosters team spirit	0.46	0.45	0.47	0.51	0.59	0.48	0.47	0.59	0.41	0.32	0.54	0.47	0.46	0.59	0.70	0.62	0.68	0.58	0.65	0.63	0.58	0.56	
24 Communicates	0.51	0.55	0.58	0.48	0.50	0.51	0.50	0.48	0.54	0.45	0.58	0.56	0.38	0.54	0.46	0.47	0.63	0.61	0.49	0.60	0.68	0.61	0.57

Table 9: Intercorrelations of the EIQ³ᴰ competencies

	1	2	3	4	5	6	7	8	9	10	11
1 Shows self understanding											
2 Shows self value	0.66										
3 Demonstrates self regulation	0.65	0.78									
4 Demonstrates openness	0.62	0.64	0.71								
5 Drives for results	0.53	0.67	0.66	0.62							
6 Drives for change	0.62	0.72	0.71	0.71	0.76						
7 Understands others	0.64	0.61	0.65	0.57	0.44	0.55					
8 Appreciates others	0.57	0.57	0.63	0.64	0.40	0.55	0.64				
9 Exerts influence	0.70	0.74	0.77	0.71	0.62	0.72	0.70	0.72			
10 Builds relationships	0.60	0.62	0.65	0.65	0.56	0.67	0.63	0.72	0.77		
11 Leads for results	0.63	0.68	0.67	0.71	0.72	0.83	0.61	0.60	0.78	0.76	
12 Inspires commitment	0.63	0.65	0.65	0.65	0.54	0.68	0.64	0.69	0.78	0.73	0.73

Table 10: Intercorrelations of the EIQ³ᴰ major areas

	1	2	3	4	5
1 Self awareness					
2 Self management	0.79				
3 Self motivation	0.74	0.78			
4 Social awareness	0.72	0.74	0.58		
5 Social management	0.77	0.80	0.73	0.82	
6 Social motivation	0.76	0.78	0.80	0.75	0.87

The correlations between the competency facets and competencies, and competencies and major areas are shown in Tables 11 and 12. The shaded cells indicate the structure of the EIQ³ᴰ, showing which competency facets make up each competency, and which competency makes up each major area. The high level of correlations between the competency facets and competencies (average=0.86), and between the competencies and major areas (average = 0.92) is primarily due to one of the lower level scales comprising half of the higher level one in each correlation. For example, the competency 'Shows self understanding' is made up from the facets 'Self assessment' and 'Self literacy', so there will be significant overlap in any correlation due to the two scales having shared items.

Table 11: Correlations of EIQ^{3D} competency facets with competencies

	Shows self understanding	Shows self value	Demonstrates self regulation	Demonstrates openness	Drives for results	Drives for change	Understands others	Appreciates others	Exerts influence	Builds relationships	Leads for results	Inspires commitment
Self assessment	0.87	0.62	0.63	0.61	0.53	0.60	0.57	0.52	0.66	0.54	0.59	0.55
Self literacy	0.92	0.57	0.54	0.51	0.44	0.51	0.59	0.50	0.60	0.53	0.54	0.57
Self confidence	0.63	0.90	0.71	0.60	0.65	0.72	0.55	0.47	0.66	0.56	0.66	0.60
Authenticity	0.54	0.88	0.67	0.54	0.53	0.55	0.54	0.55	0.65	0.55	0.55	0.56
Self control	0.58	0.66	0.91	0.65	0.48	0.61	0.63	0.62	0.70	0.59	0.58	0.61
Responsibility	0.59	0.75	0.89	0.63	0.72	0.68	0.54	0.51	0.69	0.59	0.64	0.56
Openness to change	0.52	0.57	0.61	0.87	0.66	0.69	0.47	0.49	0.61	0.55	0.69	0.55
Openness to feedback	0.56	0.54	0.62	0.88	0.43	0.54	0.53	0.62	0.63	0.59	0.55	0.60
Initiative	0.51	0.64	0.66	0.61	0.92	0.73	0.45	0.40	0.63	0.54	0.69	0.55
Achievement orientation	0.46	0.58	0.54	0.51	0.91	0.66	0.36	0.34	0.51	0.49	0.62	0.44
Optimism	0.61	0.72	0.73	0.67	0.71	0.91	0.52	0.56	0.71	0.65	0.73	0.64
Creativity	0.50	0.57	0.54	0.59	0.66	0.89	0.47	0.42	0.59	0.56	0.77	0.59
People judgement	0.48	0.50	0.54	0.46	0.32	0.41	0.84	0.46	0.53	0.46	0.44	0.47
Emotional literacy	0.63	0.57	0.59	0.54	0.44	0.54	0.91	0.64	0.68	0.63	0.61	0.63
Positive regard	0.52	0.53	0.58	0.55	0.34	0.48	0.63	0.91	0.68	0.70	0.55	0.63
Trust radius	0.50	0.49	0.54	0.60	0.39	0.51	0.51	0.88	0.60	0.58	0.51	0.60
Influence	0.62	0.62	0.67	0.64	0.52	0.62	0.68	0.73	0.90	0.72	0.71	0.74
Constructive discontent	0.65	0.72	0.73	0.66	0.61	0.69	0.60	0.58	0.91	0.69	0.71	0.67
Develops people	0.52	0.52	0.55	0.57	0.45	0.56	0.57	0.68	0.67	0.89	0.66	0.63
Develops collaboration	0.56	0.59	0.62	0.61	0.56	0.65	0.58	0.64	0.73	0.92	0.71	0.69
Leads the vision	0.61	0.67	0.65	0.65	0.68	0.78	0.60	0.58	0.77	0.73	0.94	0.72
Leads the change	0.57	0.61	0.61	0.69	0.67	0.79	0.55	0.54	0.69	0.70	0.94	0.66
Fosters team spirit	0.51	0.55	0.60	0.61	0.40	0.57	0.61	0.74	0.69	0.71	0.61	0.85
Communicates	0.59	0.60	0.56	0.56	0.54	0.63	0.54	0.52	0.69	0.61	0.69	0.92

Table 12: Correlations of EIQ^{3D} competencies with major areas

	Self awareness	Self management	Self motivation	Social awareness	Social management	Social motivation
Shows self understanding	0.92	0.69	0.62	0.66	0.69	0.68
Shows self value	0.90	0.77	0.74	0.65	0.72	0.72
Demonstrates self regulation	0.78	0.93	0.73	0.70	0.75	0.71
Demonstrates openness	0.69	0.92	0.71	0.67	0.72	0.73
Drives for results	0.65	0.69	0.92	0.46	0.63	0.67
Drives for change	0.73	0.77	0.95	0.61	0.74	0.81
Understands others	0.69	0.66	0.53	0.88	0.71	0.67
Appreciates others	0.63	0.69	0.52	0.93	0.77	0.69
Exerts influence	0.79	0.81	0.72	0.79	0.94	0.84
Builds relationships	0.67	0.71	0.66	0.75	0.95	0.80
Leads for results	0.72	0.75	0.83	0.66	0.82	0.93
Inspires commitment	0.70	0.70	0.66	0.74	0.80	0.93

The influence of background factors on scale scores

This section explores how responses to the EIQ^{3D} are associated with the background factors of respondents' age, sex and ethnic background.

The association between scale scores and respondents' age is shown in Table 13. Due to the fairly large sample size (n=1405) all correlations between the EIQ^{3D} scales and age are statistically significant at $p<0.05$. The strongest association at the level of the competency facets is between age and Trust radius, followed by Fosters team spirit, Responsibility and Develops people. At the level of competencies the highest association is between age and Appreciates others, and at the major area level between age and Self management and Social awareness. Across all EIQ^{3D} scales, whether at the level of the competency facets, competencies or major areas, the correlations are positive. Older respondents therefore tended to rate themselves slightly higher on average than younger respondents.

To understand further the impact of age on responses to the EIQ^{3D}, it is informative to examine the proportion of variation in scale responses associated with age. Squaring the correlation coefficients gives the overlap between scale preferences and age, showing at its highest the overlap to be less than 5% (the square of the 0.22 correlation between age and Trust radius). Across all 42 correlations shown in Table 13, the mean variation in responses associated with age is less than 2%. Whilst age has a relatively consistent effect on self-report for all scales, its overall impact on the EIQ^{3D} is minimal.

Table 13: Correlations between age, major area, competencies and competency facets (n=1405)			
Self awareness	**0.12**	**Social awareness**	**0.19**
Shows self understanding	0.10	Understands others	0.12
Self assessment	0.06	People judgement	0.06
Self literacy	0.12	Emotional literacy	0.14
Shows self value	0.12	Appreciates others	0.22
Self confidence	0.07	Positive regard	0.17
Authenticity	0.16	Trust radius	0.22
Self management	**0.19**	**Social management**	**0.14**
Demonstrates self regulation	0.17	Exerts influence	0.12
Self control	0.12	Influence	0.13
Responsibility	0.19	Constructive discontent	0.10
Demonstrates openness	0.18	Builds relationships	0.15
Openness to change	0.15	Develops people	0.18
Openness to feedback	0.17	Develops collaboration	0.10
Self motivation	**0.11**	**Social motivation**	**0.17**
Drives for results	0.11	Leads for results	0.14
Initiative	0.13	Leads the vision	0.12
Achievement orientation	0.07	Leads the change	0.14
Drives for change	0.10	Inspires commitment	0.18
Optimism	0.10	Fosters team spirit	0.20
Creativity	0.09	Communicates	0.13

The means and SDs for the scale scores for males and females are shown in Table 14. Where differences do exist, they consistently show that males rate themselves more highly than females. Statistically significant differences are seen on 25 of the 42 EIQ[3D] competency facets, competencies and major areas.

At the level of major areas, three – Self management, Self motivation and Social management – show statistically significance differences between males and females. In each case, males report higher scores than females on average. All of the competencies and competency facets under Self management and Self motivation also show statistically significant differences in favour of males, as do the majority of those in the Social management area. Differences for some scales and groups are seen for Self awareness and Social motivation, though the patterns are not consistent. Where differences do emerge, they again favour males, though no differences are seen for any scale or groups under Social awareness.

The detection of statistical significance is influenced by sample size. Large sample sizes, such as those used here, can make quite modest differences statistically significant. It is therefore useful to examine 'effect size' (see the last column of Table 14). Effect size is calculated by dividing the mean difference between two groups by their pooled standard deviation, so describing the difference as a proportion of the distribution. Widely accepted 'interpretations' of effect size have been given by Cohen (1988) who describes values less than 0.2 as 'small', values from 0.20 to 0.5 as 'medium' and values above 0.5 as large. All effect sizes for the differences between mean male and female ratings were less than 0.5, with 25 of the 42 being below 0.2.

Table 14: Descriptive statistics for males (n=677) and females (n=728) on the EIQ^{3D} competency facets, competencies and major areas						
	Males		Females		Difference	Effect size
	Mean	SD	Mean	SD		
Self awareness	4.40	0.60	4.32	0.61	0.08	0.13
Shows self understanding	4.33	0.70	4.30	0.72	0.03	0.05
Self assessment	4.44	0.69	4.35	0.72	0.09*	0.14
Self literacy	4.23	0.86	4.26	0.89	0.03	0.04
Shows self value	4.47	0.61	4.34	0.62	0.13*	0.20
Self confidence	4.41	0.70	4.21	0.75	0.20*	0.28
Authenticity	4.53	0.66	4.48	0.65	0.05	0.07
Self management	4.45	0.64	4.26	0.62	0.19*	0.28
Demonstrates self regulation	4.57	0.72	4.37	0.70	0.20*	0.28
Self control	4.29	0.83	4.07	0.82	0.22*	0.26
Responsibility	4.85	0.75	4.67	0.75	0.18*	0.24
Demonstrates openness	4.32	0.66	4.16	0.65	0.16*	0.25
Openness to change	4.50	0.72	4.36	0.75	0.14*	0.18
Openness to feedback	4.15	0.79	3.96	0.75	0.19*	0.25
Self motivation	4.63	0.63	4.44	0.65	0.19*	0.29
Drives for results	4.66	0.60	4.54	0.63	0.12*	0.19
Initiative	4.59	0.68	4.46	0.72	0.13*	0.19
Achievement orientation	4.73	0.62	4.62	0.66	0.11*	0.16
Drives for change	4.61	0.74	4.35	0.76	0.26*	0.34
Optimism	4.68	0.84	4.41	0.93	0.27*	0.30
Creativity	4.53	0.77	4.29	0.79	0.24*	0.31
Social awareness	4.29	0.56	4.28	0.55	0.01	0.02
Understands others	4.17	0.56	4.16	0.54	0.01	0.02
People judgement	3.86	0.54	3.83	0.52	0.03	0.06
Emotional literacy	4.48	0.72	4.49	0.71	0.01	0.02
Appreciates others	4.40	0.67	4.39	0.69	0.01	0.02
Positive regard	4.60	0.81	4.64	0.81	0.04	0.06
Trust radius	4.21	0.69	4.14	0.72	0.07	0.10
Social management	4.41	0.68	4.27	0.65	0.14*	0.21
Exerts influence	4.46	0.68	4.31	0.66	0.15*	0.22
Influence	4.48	0.73	4.42	0.70	0.06	0.09
Constructive discontent	4.44	0.75	4.21	0.77	0.23*	0.30
Builds relationships	4.37	0.76	4.22	0.73	0.15*	0.19
Develops people	4.30	0.74	4.25	0.75	0.05	0.06
Develops collaboration	4.43	0.90	4.20	0.89	0.23*	0.26
Social motivation	4.33	0.68	4.24	0.66	0.09	0.13
Leads for results	4.41	0.70	4.25	0.70	0.16*	0.22
Leads the vision	4.32	0.76	4.19	0.76	0.13*	0.16
Leads the change	4.50	0.74	4.31	0.73	0.19*	0.25
Inspires commitment	4.25	0.74	4.23	0.73	0.02	0.03
Fosters team spirit	4.36	0.71	4.36	0.72	0.00	0.00
Communicates	4.14	0.94	4.10	0.95	0.04	0.04

*p<0.01

	White (N=748)	Mixed (N=74)	Asian or Asian British (N=387)	Black or Black British (N=107)	Chinese or Other Ethnic Group (N=70)
Table 15: Means and SDs for ethnic groups on the EIQ³ᴰ competency facets, competencies and major areas					
Self awareness	4.35 (0.58)	4.30 (0.60)	4.40 (0.59)	4.42 (0.62)	4.24 (0.78)
Shows self understanding	4.32 (0.68)	4.24 (0.72)	4.33 (0.71)	4.34 (0.71)	4.22 (0.89)
Self assessment	4.39 (0.70)	4.32 (0.71)	4.41 (0.70)	4.41 (0.70)	4.35 (0.77)
Self literacy	4.25 (0.84)	4.17 (0.89)	4.26 (0.87)	4.27 (0.89)	4.10 (1.09)
Shows self value	4.38 (0.61)	4.36 (0.60)	4.47 (0.58)	4.51 (0.63)	4.25 (0.76)
Self confidence	4.23 (0.73)	4.26 (0.68)	4.44 (0.68)	4.43 (0.74)	4.19 (0.86)
Authenticity	4.52 (0.64)	4.45 (0.62)	4.51 (0.64)	4.58 (0.67)	4.31 (0.78)
Self management	4.35 (0.64)	4.27 (0.57)	4.38 (0.60)	4.41 (0.64)	4.26 (0.79)
Demonstrates self regulation	4.46 (0.72)	4.41 (0.68)	4.48 (0.68)	4.59 (0.72)	4.38 (0.89)
Self control	4.16 (0.83)	4.15 (0.82)	4.20 (0.80)	4.31 (0.87)	4.10 (0.96)
Responsibility	4.75 (0.76)	4.67 (0.71)	4.76 (0.72)	4.88 (0.73)	4.66 (0.95)
Demonstrates openness	4.24 (0.67)	4.12 (0.59)	4.29 (0.62)	4.23 (0.67)	4.14 (0.77)
Openness to change	4.41 (0.75)	4.34 (0.62)	4.48 (0.69)	4.39 (0.75)	4.44 (0.89)
Openness to feedback	4.06 (0.78)	3.91 (0.78)	4.09 (0.74)	4.07 (0.79)	3.85 (0.77)
Self motivation	4.49 (0.65)	4.52 (0.59)	4.60 (0.61)	4.66 (0.64)	4.49 (0.71)
Drives for results	4.57 (0.63)	4.61 (0.57)	4.61 (0.58)	4.67 (0.57)	4.58 (0.66)
Initiative	4.52 (0.73)	4.53 (0.66)	4.50 (0.66)	4.57 (0.66)	4.49 (0.73)
Achievement orientation	4.63 (0.65)	4.69 (0.62)	4.73 (0.62)	4.77 (0.58)	4.67 (0.68)
Drives for change	4.40 (0.76)	4.43 (0.71)	4.59 (0.72)	4.65 (0.78)	4.39 (0.87)
Optimism	4.45 (0.90)	4.46 (0.95)	4.70 (0.82)	4.73 (0.88)	4.44 (1.04)
Creativity	4.35 (0.78)	4.41 (0.69)	4.49 (0.77)	4.56 (0.80)	4.35 (0.85)

Social awareness	4.30 (0.55)	4.25 (0.50)	4.28 (0.54)	4.34 (0.57)	4.15 (0.66)
Understands others	4.19 (0.53)	4.17 (0.49)	4.14 (0.56)	4.18 (0.58)	4.10 (0.65)
People judgement	3.86 (0.52)	3.84 (0.46)	3.84 (0.54)	3.90 (0.55)	3.75 (0.53)
Emotional literacy	4.52 (0.68)	4.49 (0.66)	4.44 (0.73)	4.47 (0.76)	4.46 (0.87)
Appreciates others	4.41 (0.68)	4.33 (0.66)	4.42 (0.62)	4.50 (0.69)	4.19 (0.78)
Positive regard	4.59 (0.81)	4.67 (0.78)	4.68 (0.73)	4.76 (0.84)	4.41 (0.96)
Trust radius	4.22 (0.71)	3.98 (0.68)	4.16 (0.67)	4.24 (0.67)	3.97 (0.76)
Social management	4.29 (0.66)	4.31 (0.56)	4.45 (0.63)	4.42 (0.72)	4.22 (0.84)
Exerts influence	4.34 (0.66)	4.33 (0.57)	4.47 (0.65)	4.44 (0.71)	4.32 (0.84)
Influence	4.41 (0.70)	4.41 (0.62)	4.53 (0.69)	4.50 (0.77)	4.42 (0.89)
Constructive discontent	4.28 (0.78)	4.26 (0.72)	4.42 (0.72)	4.37 (0.78)	4.21 (0.86)
Builds relationships	4.24 (0.74)	4.29 (0.63)	4.42 (0.70)	4.41 (0.82)	4.13 (0.89)
Develops people	4.25 (0.74)	4.30 (0.61)	4.35 (0.70)	4.39 (0.80)	4.06 (0.83)
Develops collaboration	4.22 (0.90)	4.29 (0.83)	4.49 (0.84)	4.43 (0.96)	4.20 (1.05)
Social motivation	4.26 (0.67)	4.24 (0.56)	4.32 (0.65)	4.42 (0.71)	4.17 (0.76)
Leads for results	4.27 (0.69)	4.30 (0.65)	4.41 (0.67)	4.48 (0.76)	4.24 (0.80)
Leads the vision	4.22 (0.76)	4.20 (0.71)	4.33 (0.73)	4.39 (0.82)	4.17 (0.85)
Leads the change	4.33 (0.72)	4.40 (0.68)	4.49 (0.72)	4.58 (0.79)	4.31 (0.85)
Inspires commitment	4.25 (0.73)	4.18 (0.61)	4.24 (0.74)	4.36 (0.77)	4.09 (0.79)
Fosters team spirit	4.38 (0.70)	4.29 (0.58)	4.32 (0.70)	4.46 (0.78)	4.28 (0.84)
Communicates	4.11 (0.95)	4.06 (0.81)	4.16 (0.95)	4.26 (0.93)	3.90 (0.89)

Respondents were asked to indicate their ethnic background when completing the EIQ[3D], using the 16 categories shown in Table 4. Due to the small numbers in some categories making reliable analysis of score differences between groups difficult, these 16 categories were collapsed into the five broader categories of 'White', 'Mixed', Asian or Asian British', 'Black or Black British' and 'Chinese or Other Ethnic Group'. Whilst the collapsing of categories is not ideal, as it is likely to mask more subtle differences, it avoids the lack of reliability that is introduced when using small numbers and allows a preliminary investigation of ethnic differences until larger numbers permit a more thorough analysis.

The mean score differences on each of the EIQ^{3D} scales were analysed using ANOVAS followed by post-hoc comparisons of scales that showed significant differences at the p<0.01 level. At the level of the 24 competency facets, the findings are summarised below:

- Self confidence was significant higher in the Asian or Asian British group than the White group;

- Optimism was significantly higher in the Asian or Asian British group than the White group;

- Develops collaboration was significantly higher in the Asian or Asian British group than the White group;

- Leads the change was significantly higher in the Asian or Asian British and Black or Black British groups than the White group.

At the level of the competencies and major areas, three significant differences were also observed. In each of these cases a similar group difference at the competency level was also observed, reflecting the differences observed above in the competencies that form the competency group or major area. The difference at the level of competencies and major areas were:

- Drives for change was significantly higher in the Asian or Asian British group than the White group, likely due to Optimism which is a competency in this competency group showing a similar difference;

- Builds relationships was significantly higher in the Asian or Asian British group than the White group, likely due to Develops collaboration which is a competency in this competency group showing a similar difference;

- Social management was significantly higher in the Asian or Asian British group than the White group, likely due to Leads the change which is a competency in this competency group showing a similar difference.

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